

ABSTRACT

An AM neighboring interference removing method and circuit is provided which can select only a desired AM modulation wave even if an interference AM modulation wave 5 is partially superposed upon the desired AM modulation wave. An AM modulation wave desired to be received is multiplied at multipliers by local oscillation signals having frequencies  $3fc/2$  and  $fc/2$  where  $fc$  is the carrier frequency of a neighboring interference AM modulation wave. 10 High frequency components contained in the outputs of the multipliers are removed by low-pass filters. Of the outputs of the low-pass filters, the carrier frequency of the neighboring interference wave is  $fc/2$  and the AM carrier frequencies of the AM stereo modulation wave are 15  $(fc/2 + fa)$  and  $(fc/2 - fa)$ , where  $fa$  is a difference frequency between the AM carrier frequency of the AM stereo modulation wave and the carrier frequency of the neighboring interference wave. A subtractor subtracts the output of one of the low-pass filter from the output of the other to thereby cancel out the neighboring interference 20 wave. This subtraction signal is passed through a low-pass filter having a cut-off frequency of  $fc/2$  to derive only the AM stereo modulation wave.